

APPENDIX J

SOUTH DAKOTA FIELD OFFICE FIRE MANAGEMENT PLAN

Background: The South Dakota Field Office manages 279,670 surface acres of public land. Ninety percent of these public lands are in Butte (145,485 acres), Meade (42,045 acres), Harding (29,880 acres), Pennington (17,573 acres), and Stanley (16,435 acres) counties in the western part of the state. The primary economic use of public domain surface lands is for rangeland. Other significant uses include wildlife habitat, watershed protection, and recreation use.

Planning Guidance: Current guidance is provided by the South Dakota Resource Management Plan Record of Decision (April 1986) (item 8, page 10 of the April 1986 ROD), the Fossil Cycad Area of Critical Environmental Concern decision (page 4 of the ACEC Amendment, March 1999), and the Fort Meade Recreation Area ACEC Decision Record (September 26, 1996). The RMP will be updated to include the fire management objectives and guidance for each fire management zone described below.

Wildland Fire Suppression and Rehabilitation Guidance Common to all Areas Within the South Dakota Field Office Boundaries: In addition to the state guidelines found in Appendix A, the following resources or values will be given further consideration as specified.

Cultural: Appropriate management response to wildland fire in the Fossil Cycad and the Fort Meade ACEC areas would include fireline tactics that use natural barriers and hand constructed firelines.

OHV use: OHV use in the Fort Meade ACEC and the Fossil Cycad ACEC is limited to designated roads and trails. Fire vehicles will strive to limit repeated travel over the same route to discourage the establishment of new trails and roads.

Prescribed Fire and Other Fuels Management Guidance Common to all Areas Within the South Dakota Field Office Boundaries: State guidance found in Appendix A also applies to the South Dakota Field Office.

EXEMPTION AREA (B2)

Area description: The area includes 22,400 acres of public land that is intermingled with private land around Deadwood and Lead, South Dakota. Approximately 23 percent of this surface area is administered by the BLM and 77 percent is private surface. The Exemption Area is surrounded by Forest Service lands. A forest cover consisting mainly of ponderosa pine with some white

spruce covers most of the steep terrain. The grass cover consists of alpine timothy, pine grass, Canadian wild rye and assorted bromes. Forest lands cover approximately 90 percent of the public lands.

Wildland fire history: Between 1978 and 1999, federal agencies have responded to 25 fires which burned an estimated 11 acres. Average fire size was .4 acres.

Interface: Numerous residential and commercial developments are scattered throughout the private lands within the boundaries of this area. This includes a large number of mostly permanent dwellings, many of which are built within a few feet of public land. Hazardous fuels have built up in many areas. Seven priority interface areas have been identified.

Area concerns and constraints: The most significant concern and constraint is the amount and proximity of the existing urban interface. The risk of wildland fire in an urban interface area is a major concern in the Exemption Area. Most of the land in this area lies within 3 miles of either Deadwood or Lead. Dozens of permanent and vacation homes, businesses, municipal buildings, and commercial developments are in close proximity to BLM administered public lands and hazardous fuels. The combination of steep slopes and dense stands of pine cover create a hazardous fuel load for much of the area. Adjoining private lands will both drive and place constraints on fire management opportunities and will require close coordination and consultation with private landowners and the Forest Service.

Other concerns focus around structural developments, air quality and smoke dispersal, social and political considerations, and impacts of wildland fire and prescribed fires on local businesses, especially those related to recreation and tourism.

The area around Belle Eldridge Mine, southeast of Deadwood, is contaminated with heavy metals from mining activities. Ground crews and heavy equipment should use special care in this area until after heavy metals cleanup is complete. Heavy equipment should not be used on a suspected tailings repository located in S1/2NE1/4 of Sec. 26 T.5N., R.3E., BHM.

Resource objectives: Silvicultural practices will be used to maintain existing stands of ponderosa pine, reduce unwanted ponderosa encroachment, control insect and disease infestations, prevent hazardous fuel buildups, and

reduce safety hazards. Another resource objective is to maintain stable soils and sustain current land uses.

Fire objective: Wildland fire is not desired due to urban interface and scattered land pattern. The appropriate management response to wildland fire within the Exemption Area will be aggressive fire suppression. Vegetative management will be used to lower fuel levels, reduce risk levels, and reduce wildland fire severity. Hazardous fuels reduction is a primary fire management objective. Prescribed fire may be used in conjunction with mechanical and other treatments to meet this objective.

Wildland fire suppression and rehabilitation: Heavy equipment should be used with extreme caution to avoid mishaps from unmarked mining features throughout the Exemption Area. These features include unmarked mine shafts, adits, and vents that pose a safety hazard. Heavy equipment and ground crews should not be used for wildland fire suppression on sites contaminated with heavy metals from mining activities around the Belle Eldridge Mine southeast of Deadwood (W1/2NW1/4 of Sec. 25, and a portion of E1/2NE1/4 of Sec. 26, T.5N., R.3E., BHM.

Heavy equipment should not be used on a suspected tailings repository located in S1/2NE1/4 of Sec. 26 T.5N., R.3E., BHM.

Prescribed fire and other fuels management: Prescribed fire would only be used in this area in conjunction with other intensive fuels management treatments due to the proximity to Deadwood, Lead, and surrounding developments. Prescribed fire may be used to achieve desired plant communities and to reduce hazardous fuel loads. Land uses will be monitored to determine the extent objective are met and land uses are adjusted to sustain stable soils and vegetation. Follow-up treatments will probably be necessary every 5 to 10 years following initial treatment.

Air quality: Prescribed burning should not occur under conditions that result in a deterioration of air quality in Lead and Deadwood.

Hazardous fuels reduction plan: A Hazardous fuels reduction plan will be developed to reduce the risk of wildland fire near Lead and Deadwood, rural subdivisions, communications sites, power lines and pipeline rights-of-way, and other facilities and commercial uses.

FORT MEADE RECREATION AREA ACEC (B3)

Area description: This area contains 6,700 acres of public lands. Two major vegetative types occur in the area. Mid-grass prairie association is found on the north half and the unforested areas of the south half. The major plants in this association include bluestem, western wheatgrass, green needlegrass, and smooth brome. The other major vegetative type is a typical Black Hills timber association found on the forested portions of the south half. The major species include Ponderosa pine, bur oak, and smooth brome. Average annual precipitation ranges from 18 to 22 inches. This area is primarily used for recreation.

Wildland fire history: Between 1978 and 1999, federal agencies responded to 8 fires which burned an estimated 33 acres. Average fire size was 4.1 acres.

Interface: The west boundary of the area is adjacent to the east side of Sturgis, SD. Additional housing developments are located in adjacent areas. Historic Fort Meade, Fort Meade Medical Center, Black Hills National Cemetery, and housing developments are located in this area.

Area concerns and constraints: This area is a designated ACEC and contains historic and cultural sites. It is adjacent to the city of Sturgis, Fort Meade Medical Center, Black Hills National Cemetery, and housing developments. Special concerns and constraints include cultural, paleontological, and vegetative values that might be affected by fire fighting equipment, and the use of earth moving/tillage equipment.

Resource objectives: Resource objectives include maintaining and preserving the historic structures and associated resources contributing to the historic landscape within the ACEC; increasing vegetation diversity and effective edge (transitional zones where two plant communities or successional stages meet); retaining and enhancing key habitat components for game and nongame wildlife species; removing and controlling pine encroachment in meadow areas and deciduous draws using prescribed fire and/or selective fuel-wood cutting.

Fire objective: Wildland fire is not desired due to urban interface and ACEC values. The appropriate management response to wildland fire within the Fort Meade ACEC would be aggressive fire suppression in order to protect resource values, adjacent residential and city interface property. Hazardous fuel reduction efforts may be initiated to reduce the threat of wildland fire to adjacent private land and structures. Prescribed fire may be desirable. However, concerns focus around structural developments and

historical areas. Social and political considerations will dictate how each fire occurrence will be managed.

Wildland Fire Suppression and rehabilitation guidance: The Fort Meade ACEC is a VRM class II area, and fire rehabilitation should be coordinated with the Field Office VRM specialist.

Prescribed fire and other fuels management: Prescribed fire may be used to achieve desired plant communities, to manage wildfire, and to reduce hazardous fuel loads. All fuels management projects will be monitored (short and long term) to determine if project objectives have been met and for future reference. Land uses will be monitored and adjusted as necessary after fire to sustain stable soils and vegetation. Priority areas for hazardous fuels reduction would include Bluxburg, lands adjacent to Fort Meade Hospital, and lands adjacent to the city of Sturgis.

REMAINDER OF SOUTH DAKOTA FIELD OFFICE (B4)

Area description: This area encompasses close to 269,000 surface acres, mostly in scattered isolated tracts located throughout South Dakota. The primary land use for these tracts is for livestock grazing. Other values include wildlife habitat, watershed protection, and recreation opportunities. The vegetation is comprised of short- and mixed-grass prairie interspersed with sagebrush and western juniper in the Belle Fourche and Cheyenne river breaks. Precipitation varies from 13 to 17 inches in an average year.

Wildland fire history: Between 1978 and 1999, federal agencies responded to 8,321 fires which burned an estimated 399,500 acres. Average fire size was 48 acres.

Interface: Interface areas exist in Custer and Fall River counties.

Area concerns and constraints: The scattered land pattern is intermixed with state and private lands. Use of heavy equipment and other vehicles off designated roads

and trails is prohibited in the Fossil Cycad ACEC, northeast of Edgemont, SD, to protect geologic and paleontological values. Oil wells south of Edgemont contain hydrogen sulfide, which poses a safety concern for firefighters in the area. Obvious concerns include structural developments, croplands, livestock, and livestock forage needs. Social and political considerations will dictate how each fire occurrence will be managed.

Resource objectives: Manage native vegetation to meet standards for rangeland health. Maintain stable soils and sustain current land uses. Sagebrush habitats, especially those in identified sage grouse nesting and wintering areas and big game concentration areas should be maintained. Manage for healthy perennial vegetation and to reduce noxious weed infestations.

Fire management objectives: Fire, in most cases, is not desirable throughout this zone. Part of this objective is to reduce the threat of wildland fire to adjacent private land, primarily structures. The appropriate management response to wildland fire would generally be aggressive fire suppression. Prescribed fire could be used to reduce hazardous fuels or achieve other resource objectives. BLM could use prescribed fire in the remainder of the South Dakota Field Office area to reduce hazardous fuels or to meet other resource management objectives. The BLM could also be a cooperator on a prescribed fire initiated by another party.

Prescribed fires and other fuels management: Areas of fuels buildup most likely to be treated by prescribed fire would be heavy cover of junipers in the Cheyenne River breaks. All fuels management projects should be monitored (short and long-term) to determine if project objectives have been met and for future reference. Land uses should be monitored and adjusted as necessary after fire to sustain stable soils and vegetation.

Minerals: Fire treatment in areas that are developed for minerals or oil and gas will be coordinated with the developing companies to limit the danger from hydrogen sulfide gas exposure.